

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



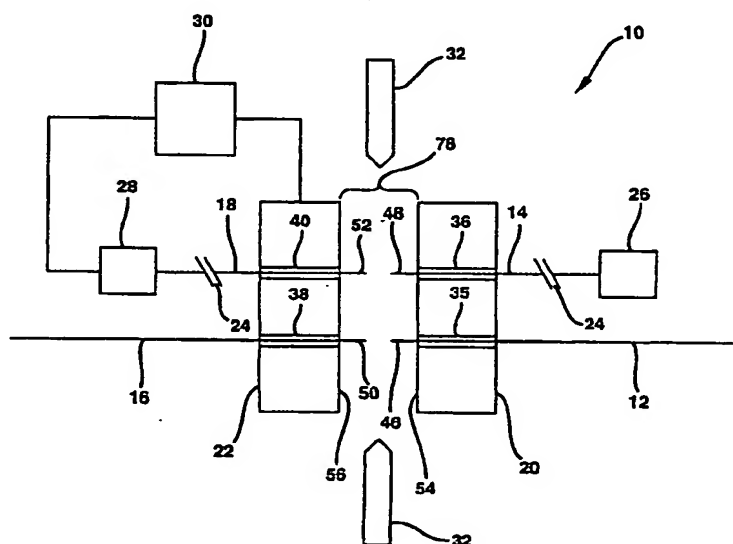
(43) International Publication Date  
7 September 2001 (07.09.2001)

PCT

(10) International Publication Number  
**WO 01/65288 A1**

- (51) International Patent Classification<sup>7</sup>: **G02B 6/255**
- (21) International Application Number: **PCT/US01/03932**
- (22) International Filing Date: 7 February 2001 (07.02.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
00400575.7 2 March 2000 (02.03.2000) EP
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- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR).
- Published:  
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **OPTICAL FIBER SPLICING PROCESS**



(57) Abstract: A method and apparatus for aligning and splicing optical fibers (12, 14, 16, 18) whereby the splice losses may be accurately calculated. Two optical fibers (12, 16) are loaded into two grooved supports (20, 22) and secured in place. The optical fibers (12, 16) are cleaved resulting in four cleaved ends (46, 48, 50, 52). The second grooved support (22) is rotated about an axis (72) aligning cleaved ends (46, 50) and cleaved ends (48, 52) with one another. The cleaved ends (46, 50) are then spliced to one another. The splice losses associated with splicing cleaved ends (46, 50) to one another may be accurately estimated by splicing the remaining cleaved ends (48, 52) together and measuring the optical losses across the splice.

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